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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,642	03/20/2002	Takaya Sato	08292.045	7426

7590

12/11/2002

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EXAMINER

NGUYEN, JIMMY T

ART UNIT

PAPER NUMBER

3725

DATE MAILED: 12/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

S.M.

**Office Action Summary**

Application No.

10/088,642

Applicant(s)

SATO ET AL.

Examiner

Jimmy T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 November 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 9-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.                      6) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of Group I containing claims 1-8 in Paper No. 5 is acknowledged.

Claims 9-12 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

An action on the merits follows.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

✓ The preamble of claim1 is vague and indefinite because the preamble is confusing. Is is suggested that the term "a roller processing/rolling" in line 1 of claim 1 should be amended to recite "a rolling apparatus for processing/rolling" in order to overcome this rejection.

"the current collecting member" (claims 1 and 5, line 2) lacks of antecedent basis.

✓ "the respective work roll" (claim 1, lines 4-5) lacks of antecedent basis, and furthermore, it is unclear of which "respective work roll" Applicant is referring to.

“the respective roll” (claim 4, line 4) lacks of antecedent basis, and furthermore, it is unclear of which “respective work roll” Applicant is referring to.

“the other work roll” (claim 5, line 3) lacks of antecedent basis. It’s suggested that “one work roll and the other work roll” should recites “an upper work roll and a lower work roll” or “a first work roll and a second work roll”.

“the respective roll” (claim 8, line 4) lacks of antecedent basis, and furthermore, it is unclear of which “respective work roll” Applicant is referring to.

“a powdered electrode active substance” and “a current collecting member” in the preamble of claims 1 and 5 are inferentially claimed and fail to be positively recited. It is not clear to the Examiner if Applicant intends to positively recite these limitations.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 5-6, as best as can be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over ME (Matsushita Electric Ind. Co.) (JP 10-270296) in view of De Mol et al. (US 4,700,557). ME discloses a rolling apparatus for rolling an electrode structure (9) comprising a pair of work rolls (10, 11). ME discloses a pressing force onto the surface of the roll. ME does not expressly disclose the pressing force is a pair of pressurized backup rolls. However, De Mol, in a similar rolling art, teaches a rolling apparatus for pressing a work piece

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comprising: a pair of work rolls (12); a pair of backup rolls (18) that each has a diameter larger than a diameter of the work roll; a pressuring device pressing the backup roll toward the work roll side (see col. 2, lines 8-15), and a drive unit rotating the work rolls (see col. 2, lines 5-7). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided ME with the type of rolling apparatus as taught by De Mol in order to improve controlling the shape of the pressing material (see col. 1, lines 46-47).

Claims 3 and 7, as best as can be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over ME and De Mol et al., as applied to claims 1 and 5 above, further in view of Yoshida (JP 7-287465). ME do not expressly disclose the type of layer on the surface of the backup roll. However, Yoshida, in a related rolling art, teaches a backup roll that has an elastic layer on the outer periphery. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided ME's backup roll with an elastic layer as taught by Yoshida in order to prevent wearing of the outer surface of the backup roll and to prolong a service life (see abstract).

Claims 4 and 8, as best as can be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over ME and De Mol et al., as applied to claims 1 and 5 above, further in view of Metcalfe (US 5,042,281). ME discloses the rolling apparatus, ME do not expressly disclose the specific details (i.e., roll housing, roll axle..) of the apparatus. However, Metcalfe, in a related rolling art, teaches a rolling apparatus comprising: a work roll (22) having an axle mounted in a housing (124) and an opposite work roll (24) having an axle mounted in an opposite housing (126) (see figure 9). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided ME's apparatus with the type of

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structure as taught by Metcalfe in order to improve control of the pressure in the apparatus. With regards to a spacer positioned between the housings, ME, as modified by Metcalfe, disclose two separate housing, but ME do not disclose the use spacer between the housings for the adjustment purposes. However, the use of spacer is well known in the mechanical art and is a readily available hardware known to the skilled artisan for their intended purposes. Therefore, it would have been obvious to use spacer to make adjustment between the roll housings of ME' apparatus for the noted motivation.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,871,138 to Shishido et al.; US 5,217,155 to Kitahama et al.; and US 5,896,813 to Nikulainen et al. disclose rolling apparatus that are relevant to the instant invention. US 4,974,438 to Stubbins discloses a rolling housing structure, wherein each housing is provided with a spacer for adjusting the gap between rolls (see col. 2, lines 26-36).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy T Nguyen whose telephone number is (703) 305-5304. The examiner can normally be reached on Mon-Thur 8:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen Ostrager can be reached on (703) 308-3136. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3579 for regular communications and (703) 305-3579 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

JTNguyen  
December 6, 2002



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